

Data Validation Checklist Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica – Tampa, FL
 Method: SW-846 8270C Low-Level (PAH)
 Matrix: Soil
 Reviewer: Jane Lindsey
 Concurrence¹: Carol Lovett, Martha Meyers-Lee

Project No: 15268508.20000
 Job ID.: 680-87218-1
 Associated Samples: Refer to **Attachment A** (Sample Summary)
 Date(s) Collected: 02/05/2013
 Date: 02/26/2013
 Date: 03/26/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?	✓			MB 660-134901/1-A: Phenanthrene @ 4.0 µg/kg (RL 8.0, MDL 3.9)	
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	

¹ Independent technical reviewer
 URS Group, Inc.
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Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)		✓		Blank contamination action level (BCAL) ² : <ul style="list-style-type: none"> Phenanthrene: 20 µg/Kg (4.0 µg/Kg x 5) Sample-specific BCALs were developed by multiplying the BCAL by the sample dilution factor and dividing it by the percent solids. Qualification of data due to the presence of blank contamination is not warranted, as sample results were greater than sample-specific BCALs (Refer to Attachment B).	
14. Is a field duplicate associated with this Job?	✓			<ul style="list-style-type: none"> CV0748A-CS and CV0748A-CSD (680-87218-9 and 680-87218-10) CV0748B-CS and CV0748B-CSD (680-87218-11 and 680-87218-12) CV0748C-CS and CV0748C-CSD (680-87218-13 and 680-87218-14) CV0748D-CS and CV0748D-CSD (680-87218-15 and 680-87218-16) 	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to Attachment C (Evaluation of Field Duplicate Results)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer 	✓			<ul style="list-style-type: none"> Initial Calibration: 01/07/2013, instrument BSMC5973 ICV: 01/07/2013 @17:31 CCV: 02/13/2013 @11:54 CCV: 02/14/2013 @14:56 	

² BCAL developed based on the maximum amount observed in all blanks

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
narrative. <ul style="list-style-type: none"> An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 					
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> ICAL (Criteria: ≤ 15 mean %RSD with individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag non-detects If mean RRF < 0.050 (< 0.010 for poor performers), then J-flag positive results and R-flag non-detects ICV and CCV (Criteria: $\leq 20\% D$ ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %D > 20 ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects If RF < 0.050 (< 0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 	✓				
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R > Upper Control Limit (UCL) and J/R-flag results when %R < Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Prep Batch 134390: CV0800A-CS-SP (680-87218-3).	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R < 10: J and R Flag positive and ND 		✓		CV0800A-CS-SP (680-87218-3): <ul style="list-style-type: none"> Benzo(b)fluoranthene MS/MSD @ 147 and 151%R, respectively (37-130). Qualify result with J. Chrysene MSD @ 132%R (41-130). Qualification of data is not required, because the MS %R (120) is within acceptance criteria. Fluoranthene MSD @ 131%R (40-130). Qualification of data is not required, because the MS 	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
results, respectively <ul style="list-style-type: none"> MS and MSD %R >10 and <LCL: J-Flag positive and UJ-flag non-detect results MS and MSD R% >UCL (or 140): J-Flag positive results 				%R (126) is within acceptance criteria. <ul style="list-style-type: none"> Pyrene MSD @ 145%R (44-130). Qualification of data is not required, because the MS %R (129) is within acceptance criteria. 	
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	✓				
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> If %R <10, then J-flag positive and R-flag non-detect associated sample results If %R >UCL, then J-flag positive results %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results If 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results 	✓				
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	✓				
29. Were lab comments included in report?	✓			Refer to Attachment D (Case Narrative)	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment E). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
R	The sample results are unusable. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ	The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87218-1	CV0127A-CS-SP	Solid	02/05/13 10:14	02/07/13 10:42
680-87218-2	CV0127B-CS-SP	Solid	02/05/13 10:24	02/07/13 10:42
680-87218-3	CV0800A-CS-SP	Solid	02/05/13 09:40	02/07/13 10:42
680-87218-4	CV0966A-CS-SP	Solid	02/05/13 09:22	02/07/13 10:42
680-87218-5	CV0966B-CS-SP	Solid	02/05/13 09:36	02/07/13 10:42
680-87218-6	HP0325A-CS-SP	Solid	02/05/13 08:55	02/07/13 10:42
680-87218-7	HP0325B-CS-SP	Solid	02/05/13 09:00	02/07/13 10:42
680-87218-8	CV0966C-CS-SP	Solid	02/05/13 09:40	02/07/13 10:42
680-87218-9	CV0748A-CS	Solid	02/05/13 09:31	02/07/13 10:42
680-87218-10	CV0748A-CSD	Solid	02/05/13 09:33	02/07/13 10:42
680-87218-11	CV0748B-CS	Solid	02/05/13 09:35	02/07/13 10:42
680-87218-12	CV0748B-CSD	Solid	02/05/13 09:37	02/07/13 10:42
680-87218-13	CV0748C-CS	Solid	02/05/13 09:50	02/07/13 10:42
680-87218-14	CV0748C-CSD	Solid	02/05/13 09:51	02/07/13 10:42
680-87218-15	CV0748D-CS	Solid	02/05/13 09:56	02/07/13 10:42
680-87218-16	CV0748D-CSD	Solid	02/05/13 09:58	02/07/13 10:42
680-87218-17	CV0748E-CS	Solid	02/05/13 10:24	02/07/13 10:42
680-87218-18	CV0748F-CS	Solid	02/05/13 10:27	02/07/13 10:42
680-87218-19	CV0748G-CS	Solid	02/05/13 10:35	02/07/13 10:42
680-87218-20	CV0748H-CS	Solid	02/05/13 13:02	02/07/13 10:42

ATTACHMENT B

SAMPLE-SPECIFIC BLANK CONTAMINATION ACTION LEVELS

Sample-Specific Blank Contamination Action Levels

Attachment B

Sample ID:					CV0127A-CS SP	CV0127B-CS SP	CV0800A-CS SP	CV0966A-CS SP	CV0966B-CS SP	HP0325A-CS SP	HP0325B-CS SP	CV0966C-CS SP	CV0748A-CS CSD	CV0748B-CS
Lab ID:					680-87218-1	680-87218-2	680-87218-3	680-87218-4	680-87218-5	680-87218-6	680-87218-7	680-87218-8	680-87218-9	680-87218-10
%S:					81.0	59.2	76.4	71.9	58.1	64.0	84.4	77.6	73.0	63.5
DF:					1	1	4	1	4	1	4	4	4	1
Parameter	RL, µg/Kg	134390/ 1-A MB, µg/Kg	Maximum Amount Detected ¹ , µg/kg	Action Level ² , µg/kg	Sample-Specific Blank Contamination Action Levels, µg/Kg									
Phenanthrene	8.0	4.00	4.00	20	25	34	105	28	138	31	95	103	110	31
Reported Sample Result:					930	310	910	84	310	140	380	610	450	810
Reporting Limit, µg/kg:					9.9	14	42	11	55	12	38	410	43	13
Blank contamination action:					None ³	None ³	None ³	None ³	None ³	None ³	None ³	None ³	None ³	None ³

Sample-Specific Blank Contamination Action Levels

Attachment B

Sample ID:					CV0748B-CSD	CV0748C-CS	CV0748C-CSD	CV0748D-CS	CV0748D-CSD	CV0748E-CS	CV0748F-CS	CV0748G-CS	CV0748H-CS
Lab ID:					680-87218-12	680-87218-13	680-87218-14	680-87218-15	680-87218-16	680-87218-17	680-87218-18	680-87218-19	680-87218-20
%S:					65.3	77.4	65.3	67.4	67.1	61.4	69.8	88.9	91.9
DF:					1	4	1	1	1	1	1	4	4
Parameter	RL, µg/Kg	134390/1-A MB, µg/Kg	Maximum Amount Detected ¹ , µg/kg	Action Level ² , µg/kg	Sample-Specific Blank Contamination Action Levels, µg/Kg								
Phenanthrene	8.0	4.00	4.00	20	31	103	31	30	30	33	29	90	87
Reported Sample Result:					170	490	210	81	230	260	190	460	300
Reporting Limit, µg/kg:					12	41	12	12	12	13	12	36	35
Blank contamination action:					None ³	None ³	None ³	None ³	None ³	None ³	None ³	None ³	None ³

Sample-Specific Blank Contamination Action Levels

Attachment B

¹ Maximum amount detected in among all blanks

² Maximum amount detected in blanks multiplied by a factor of 10 for common blank contaminants (5 for all others)

³ Qualification of data is not warranted, because the sample concentration is greater than the sample-specific BCAL

Action: Sample results less than the sample-specific BCAL have been qualified due to the presence of blank contamination. The sample result has been U-flagged, and reporting limit elevated to the amount found in the sample.

ATTACHMENT C
EVALUATION OF FIELD DUPLICATE RESULTS

Evaluation of Field Duplicate Results

Attachment B

Analyte	CV0748A-CS (680-87218-9)	RL	CV0748A-CSD (680-87218-10)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		U 540	37	J 160	µg/kg	1750	NA	37	700	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	37	J 220	110	63	µg/kg	707.5	NA	73	283	None, absolute difference ≤ 2x Avg RL
Anthracene	70	45	170	13	µg/kg	145	NA	100	58	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(a)anthracene	400	43	470	13	µg/kg	140	16	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	430	56	410	16	µg/kg	180	5	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	630	66	560	19	µg/kg	212.5	12	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	310	110	220	31	µg/kg	352.5	NA	90	141	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	250	43	270	13	µg/kg	140	8	NA	NA	None, RPD ≤ 50%
Chrysene	550	48	470	14	µg/kg	155	16	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	81	J 110	64	31	µg/kg	352.5	NA	17	141	None, absolute difference ≤ 2x Avg RL
Fluoranthene	640	110	1000	31	µg/kg	352.5	44	NA	NA	None, RPD ≤ 50%
Fluorene	36	J 110	110	31	µg/kg	352.5	NA	74	141	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	260	110	210	31	µg/kg	352.5	NA	50	141	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	280	220	110	63	µg/kg	707.5	NA	170	283	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	300	220	100	63	µg/kg	707.5	NA	200	283	None, absolute difference ≤ 2x Avg RL
Naphthalene	200	J 220	100	63	µg/kg	707.5	NA	100	283	None, absolute difference ≤ 2x Avg RL
Phenanthrene	450	B 43	810	B 13	µg/kg	140	57	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	640	110	860	31	µg/kg	352.5	29	NA	NA	None, RPD ≤ 50%

Note: If the analyte was not detected, then the cell was left blank.

Analyte	CV0748B-CS (680-87218-11)	RL	CV0748B-CSD (680-87218-12)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene		U 230	36	J 61	µg/kg	727.5	NA	36	291	None, absolute difference ≤ 2x Avg RL
Anthracene	50	47	41	13	µg/kg	150	NA	9	60	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	300	45	210	12	µg/kg	142.5	35	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	220	59	180	16	µg/kg	187.5	NA	40	75	None, absolute difference ≤ 2x Avg RL
Benzo(b)fluoranthene	350	69	280	19	µg/kg	220	22	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	180	110	120	30	µg/kg	350	NA	60	140	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	120	45	120	12	µg/kg	142.5	NA	0	57	None, absolute difference ≤ 2x Avg RL
Chrysene	260	51	220	14	µg/kg	162.5	17	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	65	J 110	43	30	µg/kg	350	NA	22	140	None, absolute difference ≤ 2x Avg RL
Fluoranthene	560	110	380	30	µg/kg	350	38	NA	NA	None, RPD ≤ 50%
Fluorene	24	J 110	16	J 30	µg/kg	350	NA	8	140	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	87	J 110	100	30	µg/kg	350	NA	13	140	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	72	J 230	67	61	µg/kg	727.5	NA	5	291	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	79	J 230	66	61	µg/kg	727.5	NA	13	291	None, absolute difference ≤ 2x Avg RL
Naphthalene	67	J 230	58	J 61	µg/kg	727.5	NA	9	291	None, absolute difference ≤ 2x Avg RL
Phenanthrene	340	B 45	170	B 12	µg/kg	142.5	67	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	400	110	330	30	µg/kg	350	NA	70	140	None, absolute difference ≤ 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

Analyte	CV0748C-CS (680-87218-13)	RL	CV0748C-CSD (680-87218-14)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	55	J 200	21	J 60	µg/kg	650	NA	34	260	None, absolute difference ≤ 2x Avg RL
Anthracene	80	43	40	13	µg/kg	140	NA	40	56	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	460	41	260	12	µg/kg	132.5	56	NA	NA	J/UJ-flag, RPD > 50%
Benzo(a)pyrene	520	53	250	16	µg/kg	172.5	70	NA	NA	J/UJ-flag, RPD > 50%
Benzo(b)fluoranthene	750	62	380	18	µg/kg	200	65	NA	NA	J/UJ-flag, RPD > 50%
Benzo(g,h,i)perylene	370	100	160	30	µg/kg	325	NA	210	130	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(k)fluoranthene	310	41	140	12	µg/kg	132.5	76	NA	NA	J/UJ-flag, RPD > 50%
Chrysene	570	46	290	14	µg/kg	150	65	NA	NA	J/UJ-flag, RPD > 50%
Dibenzo(a,h)anthracene	120	100	52	30	µg/kg	325	NA	68	130	None, absolute difference ≤ 2x Avg RL
Fluoranthene	910	100	540	30	µg/kg	325	51	NA	NA	J/UJ-flag, RPD > 50%
Fluorene	23	J 100	12	J 30	µg/kg	325	NA	11	130	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	320	100	140	30	µg/kg	325	NA	180	130	J/UJ-flag, absolute difference > 2x Avg RL
1-Methylnaphthalene	230	200	71	60	µg/kg	650	NA	159	260	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	240	200	61	60	µg/kg	650	NA	179	260	None, absolute difference ≤ 2x Avg RL
Naphthalene	160	J 200	62	60	µg/kg	650	NA	98	260	None, absolute difference ≤ 2x Avg RL
Phenanthrene	490	B 41	210	B 12	µg/kg	132.5	80	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	860	100	440	30	µg/kg	325	65	NA	NA	J/UJ-flag, RPD > 50%

Note: If the analyte was not detected, then the cell was left blank.

Evaluation of Field Duplicate Results

Attachment B

Analyte	CV0748D-CS (680-87218-15)		RL	CV0748D-CSD (680-87218-16)		RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	12	J	59	40	J	60	µg/kg	297.5	NA	28	119	None, absolute difference ≤ 2x Avg RL
Anthracene	14		12	50		13	µg/kg	62.5	NA	36	25	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(a)anthracene	110		12	320		12	µg/kg	60	98	NA	NA	J/UJ-flag, RPD > 50%
Benzo(a)pyrene	120		15	340		15	µg/kg	75	96	NA	NA	J/UJ-flag, RPD > 50%
Benzo(b)fluoranthene	180		18	550		18	µg/kg	90	101	NA	NA	J/UJ-flag, RPD > 50%
Benzo(g,h,i)perylene	77		29	230		30	µg/kg	147.5	NA	153	59	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(k)fluoranthene	66		12	190		12	µg/kg	60	97	NA	NA	J/UJ-flag, RPD > 50%
Chrysene	130		13	360		13	µg/kg	65	94	NA	NA	J/UJ-flag, RPD > 50%
Dibenzo(a,h)anthracene	22	J	29	66		30	µg/kg	147.5	NA	44	59	None, absolute difference ≤ 2x Avg RL
Fluoranthene	210		29	700		30	µg/kg	147.5	108	NA	NA	J/UJ-flag, RPD > 50%
Fluorene	6.4	J	29	17	J	30	µg/kg	147.5	NA	10.6	59	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	64		29	200		30	µg/kg	147.5	NA	136	59	J/UJ-flag, absolute difference > 2x Avg RL
1-Methylnaphthalene	39	J	59	60		60	µg/kg	297.5	NA	21	119	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	46	J	59	78		60	µg/kg	297.5	NA	32	119	None, absolute difference ≤ 2x Avg RL
Naphthalene	46	J	59	88		60	µg/kg	297.5	NA	42	119	None, absolute difference ≤ 2x Avg RL
Phenanthrene	81	B	12	230	B	12	µg/kg	60	96	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	170		29	570		30	µg/kg	147.5	108	NA	NA	J/UJ-flag, RPD > 50%

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram

B- Compound was found in the blank and sample.

J - Estimated value

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT D
CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Job ID: 680-87218-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87218-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/07/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.6 C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0127A-CS-SP (680-87218-1), CV0127B-CS-SP (680-87218-2), CV0800A-CS-SP (680-87218-3), CV0966A-CS-SP (680-87218-4), CV0966B-CS-SP (680-87218-5), HP0325A-CS-SP (680-87218-6), HP0325B-CS-SP (680-87218-7), CV0966C-CS-SP (680-87218-8), CV0748A-CS (680-87218-9), CV0748A-CSD (680-87218-10), CV0748B-CS (680-87218-11), CV0748B-CSD (680-87218-12), CV0748C-CS (680-87218-13), CV0748C-CSD (680-87218-14), CV0748D-CS (680-87218-15), CV0748D-CSD (680-87218-16), CV0748E-CS (680-87218-17), CV0748F-CS (680-87218-18), CV0748G-CS (680-87218-19) and CV0748H-CS (680-87218-20) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/12/2013 and analyzed on 02/13/2013 and 02/14/2013.

Samples CV0800A-CS-SP (680-87218-3)[4X], CV0966B-CS-SP (680-87218-5)[4X], HP0325B-CS-SP (680-87218-7)[4X], CV0966C-CS-SP (680-87218-8)[4X], CV0748A-CS (680-87218-9)[4X], CV0748B-CS (680-87218-11)[4X], CV0748C-CS (680-87218-13)[4X], CV0748G-CS (680-87218-19)[4X] and CV0748H-CS (680-87218-20)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Phenanthrene was detected in method blank MB 660-134390/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample CV0800A-CS-SP (680-87218-3) in batch 660-134444.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT E
QUALIFIED SAMPLE RESULTS

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0127A-CS-SP

Lab Sample ID: 680-87218-1

Date Collected: 02/05/13 10:14

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 81.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	57	J	120	25	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Acenaphthylene	58		49	6.2	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Anthracene	160		10	5.2	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Benzo[a]anthracene	610		9.9	4.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Benzo[a]pyrene	650		13	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Benzo[b]fluoranthene	1000		15	7.5	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Benzo[g,h,i]perylene	500		25	5.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Benzo[k]fluoranthene	460		9.9	4.5	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Chrysene	800		11	5.6	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Dibenz(a,h)anthracene	160		25	5.1	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Fluoranthene	1300		25	4.9	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Fluorene	72		25	5.1	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Indeno[1,2,3-cd]pyrene	400		25	8.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
1-Methylnaphthalene	310		49	5.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
2-Methylnaphthalene	370		49	8.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Naphthalene	310		49	5.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Phenanthrene	930		9.9	4.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Pyrene	1000		25	4.6	ug/Kg	☆	02/12/13 13:25	02/13/13 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	87		30 - 130				02/12/13 13:25	02/13/13 18:00	1

Client Sample ID: CV0127B-CS-SP

Lab Sample ID: 680-87218-2

Date Collected: 02/05/13 10:24

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 59.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	170	U	170	34	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Acenaphthylene	21	J	68	8.5	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Anthracene	59		14	7.1	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Benzo[a]anthracene	250		14	6.6	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Benzo[a]pyrene	250		18	8.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Benzo[b]fluoranthene	420		21	10	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Benzo[g,h,i]perylene	190		34	7.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Benzo[k]fluoranthene	150		14	6.1	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Chrysene	320		15	7.6	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Dibenz(a,h)anthracene	61		34	6.9	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Fluoranthene	490		34	6.8	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Fluorene	29	J	34	6.9	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Indeno[1,2,3-cd]pyrene	170		34	12	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
1-Methylnaphthalene	150		68	7.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
2-Methylnaphthalene	250		68	12	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Naphthalene	310		68	7.4	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Phenanthrene	310		14	6.6	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Pyrene	400		34	6.3	ug/Kg	☆	02/12/13 13:25	02/13/13 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		30 - 130				02/12/13 13:25	02/13/13 18:18	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0800A-CS-SP

Lab Sample ID: 680-87218-3

Date Collected: 02/05/13 09:40

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 76.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	520	U	520	100	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Acenaphthylene	170	J	210	26	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Anthracene	170		44	22	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Benzo[a]anthracene	670		42	20	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Benzo[a]pyrene	720		54	27	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Benzo[b]fluoranthene	1400	J	64	32	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Benzo[g,h,i]perylene	490		100	23	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Benzo[k]fluoranthene	540		42	19	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Chrysene	880		47	23	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Dibenz(a,h)anthracene	190		100	21	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Fluoranthene	850		100	21	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Fluorene	36	J	100	21	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Indeno[1,2,3-cd]pyrene	480		100	37	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
1-Methylnaphthalene	950		210	23	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
2-Methylnaphthalene	1000		210	37	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Naphthalene	610		210	23	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Phenanthrene	910		42	20	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Pyrene	930		100	19	ug/Kg	*	02/12/13 13:25	02/13/13 18:37	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	112		30 - 130				02/12/13 13:25	02/13/13 18:37	4

Client Sample ID: CV0966A-CS-SP

Lab Sample ID: 680-87218-4

Date Collected: 02/05/13 09:22

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 71.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Acenaphthylene	55	U	55	6.9	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Anthracene	15		12	5.8	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Benzo[a]anthracene	64		11	5.4	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Benzo[a]pyrene	63		14	7.2	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Benzo[b]fluoranthene	88		17	8.4	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Benzo[g,h,i]perylene	63		28	6.1	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Benzo[k]fluoranthene	61		11	5.0	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Chrysene	89		12	6.2	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Dibenz(a,h)anthracene	18	J	28	5.6	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Fluoranthene	110		28	5.5	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Fluorene	7.5	J	28	5.6	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Indeno[1,2,3-cd]pyrene	44		28	9.8	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
1-Methylnaphthalene	53	J	55	6.1	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
2-Methylnaphthalene	70		55	9.8	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Naphthalene	68		55	6.1	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Phenanthrene	84		11	5.4	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Pyrene	94		28	5.1	ug/Kg	*	02/12/13 13:25	02/13/13 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	81		30 - 130				02/12/13 13:25	02/13/13 19:32	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0966B-CS-SP

Lab Sample ID: 680-87218-5

Date Collected: 02/05/13 09:36

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 58.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	680	U	680	140	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Acenaphthylene	37	J	270	34	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Anthracene	49	J	58	29	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Benzo[a]anthracene	250		55	27	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Benzo[a]pyrene	250		71	36	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Benzo[b]fluoranthene	420		84	42	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Benzo[g,h,i]perylene	200		140	30	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Benzo[k]fluoranthene	170		55	25	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Chrysene	310		62	31	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Dibenz(a,h)anthracene	52	J	140	28	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Fluoranthene	480		140	27	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Fluorene	140	U	140	28	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Indeno[1,2,3-cd]pyrene	160		140	49	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
1-Methylnaphthalene	140	J	270	30	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
2-Methylnaphthalene	180	J	270	49	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Naphthalene	180	J	270	30	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Phenanthrene	310	B	55	27	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Pyrene	380		140	25	ug/Kg	☆	02/12/13 13:25	02/13/13 19:50	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	120		30 - 130				02/12/13 13:25	02/13/13 19:50	4

Client Sample ID: HP0325A-CS-SP

Lab Sample ID: 680-87218-6

Date Collected: 02/05/13 08:55

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 64.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	160	U	160	31	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Acenaphthylene	23	J	62	7.8	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Anthracene	23		13	6.5	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Benzo[a]anthracene	130		12	6.0	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Benzo[a]pyrene	120		16	8.1	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Benzo[b]fluoranthene	210		19	9.5	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Benzo[g,h,i]perylene	97		31	6.8	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Benzo[k]fluoranthene	88		12	5.6	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Chrysene	150		14	7.0	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Dibenz(a,h)anthracene	26	J	31	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Fluoranthene	240		31	6.2	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Fluorene	11	J	31	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Indeno[1,2,3-cd]pyrene	70		31	11	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
1-Methylnaphthalene	59	J	62	6.8	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
2-Methylnaphthalene	74		62	11	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Naphthalene	100	B	62	6.8	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Phenanthrene	140		12	6.0	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Pyrene	200		31	5.7	ug/Kg	☆	02/12/13 13:25	02/13/13 20:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	90		30 - 130				02/12/13 13:25	02/13/13 20:08	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: HP0325B-CS-SP

Lab Sample ID: 680-87218-7

Date Collected: 02/05/13 09:00

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 84.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	470	U	470	94	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Acenaphthylene	97	J	190	23	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Anthracene	58		39	20	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Benzo[a]anthracene	520		38	18	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Benzo[a]pyrene	540		49	24	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Benzo[b]fluoranthene	810		57	29	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Benzo[g,h,i]perylene	390		94	21	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Benzo[k]fluoranthene	350		38	17	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Chrysene	580		42	21	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Dibenz(a,h)anthracene	110		94	19	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Fluoranthene	690		94	19	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Fluorene	32	J	94	19	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Indeno[1,2,3-cd]pyrene	330		94	33	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
1-Methylnaphthalene	180	J	190	21	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
2-Methylnaphthalene	200		190	33	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Naphthalene	270		190	21	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Phenanthrene	380	B	38	18	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Pyrene	610		94	17	ug/Kg	☆	02/12/13 13:25	02/13/13 20:27	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	115		30 - 130				02/12/13 13:25	02/13/13 20:27	4

Client Sample ID: CV0966C-CS-SP

Lab Sample ID: 680-87218-8

Date Collected: 02/05/13 09:40

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 77.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5200	U	5200	1000	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Acenaphthylene	2100	U	2100	260	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Anthracene	430	U	430	220	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Benzo[a]anthracene	870		410	200	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Benzo[a]pyrene	620		540	270	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Benzo[b]fluoranthene	850		630	320	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Benzo[g,h,i]perylene	510	J	1000	230	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Benzo[k]fluoranthene	370	J	410	190	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Chrysene	630		460	230	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Dibenz(a,h)anthracene	1000	U	1000	210	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Fluoranthene	1200		1000	210	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Fluorene	1000	U	1000	210	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Indeno[1,2,3-cd]pyrene	1000	U	1000	370	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
1-Methylnaphthalene	2100	U	2100	230	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
2-Methylnaphthalene	2100	U	2100	370	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Naphthalene	2100	U	2100	230	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Phenanthrene	610	B	410	200	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Pyrene	1000		1000	190	ug/Kg	☆	02/12/13 13:25	02/13/13 20:45	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	108		30 - 130				02/12/13 13:25	02/13/13 20:45	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748A-CS

Date Collected: 02/05/13 09:31

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-9

Matrix: Solid

Percent Solids: 73.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	540	U	540	110	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Acenaphthylene	37	J	220	27	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Anthracene	70	J	45	23	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Benzo[a]anthracene	400		43	21	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Benzo[a]pyrene	430		56	28	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Benzo[b]fluoranthene	630		66	33	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Benzo[g,h,i]perylene	310		110	24	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Benzo[k]fluoranthene	250		43	19	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Chrysene	550		48	24	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Dibenz(a,h)anthracene	81	J	110	22	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Fluoranthene	640		110	22	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Fluorene	36	J	110	22	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Indeno[1,2,3-cd]pyrene	260		110	38	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
1-Methylnaphthalene	280		220	24	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
2-Methylnaphthalene	300		220	38	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Naphthalene	200	J	220	24	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Phenanthrene	450	J	43	21	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Pyrene	640		110	20	ug/Kg	☆	02/12/13 13:25	02/13/13 21:03	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	102		30 - 130				02/12/13 13:25	02/13/13 21:03	4

Client Sample ID: CV0748A-CSD

Date Collected: 02/05/13 09:33

Date Received: 02/07/13 10:42

Lab Sample ID: 680-87218-10

Matrix: Solid

Percent Solids: 63.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	37	J	160	31	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Acenaphthylene	110		63	7.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Anthracene	170	J	13	6.6	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Benzo[a]anthracene	470		13	6.1	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Benzo[a]pyrene	410		16	8.2	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Benzo[b]fluoranthene	560		19	9.6	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Benzo[g,h,i]perylene	220		31	6.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Benzo[k]fluoranthene	270		13	5.7	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Chrysene	470		14	7.1	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Dibenz(a,h)anthracene	64		31	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Fluoranthene	1000		31	6.3	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Fluorene	110		31	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Indeno[1,2,3-cd]pyrene	210		31	11	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
1-Methylnaphthalene	110		63	6.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
2-Methylnaphthalene	100		63	11	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Naphthalene	100		63	6.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Phenanthrene	810	J	13	6.1	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Pyrene	860		31	5.8	ug/Kg	☆	02/12/13 13:25	02/13/13 21:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	87		30 - 130				02/12/13 13:25	02/13/13 21:22	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748B-CS

Lab Sample ID: 680-87218-11

Date Collected: 02/05/13 09:35

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 71.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	560	U	560	110	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Acenaphthylene	230	U	230	28	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Anthracene	50		47	24	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Benzo[a]anthracene	300		45	22	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Benzo[a]pyrene	220		59	29	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Benzo[b]fluoranthene	350		69	34	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Benzo[g,h,i]perylene	180		110	25	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Benzo[k]fluoranthene	120		45	20	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Chrysene	260		51	25	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Dibenz(a,h)anthracene	65	J	110	23	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Fluoranthene	560		110	23	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Fluorene	24	J	110	23	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Indeno[1,2,3-cd]pyrene	87	J	110	40	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
1-Methylnaphthalene	72	J	230	25	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
2-Methylnaphthalene	79	J	230	40	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Naphthalene	67	J	230	25	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Phenanthrene	340	B J	45	22	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Pyrene	400		110	21	ug/Kg	☆	02/12/13 13:25	02/14/13 16:12	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		30 - 130				02/12/13 13:25	02/14/13 16:12	4

Client Sample ID: CV0748B-CSD

Lab Sample ID: 680-87218-12

Date Collected: 02/05/13 09:37

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 65.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	30	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Acenaphthylene	36	J	61	7.6	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Anthracene	41		13	6.4	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Benzo[a]anthracene	210		12	5.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Benzo[a]pyrene	180		16	7.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Benzo[b]fluoranthene	280		19	9.3	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Benzo[g,h,i]perylene	120		30	6.7	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Benzo[k]fluoranthene	120		12	5.5	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Chrysene	220		14	6.8	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Dibenz(a,h)anthracene	43		30	6.2	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Fluoranthene	380		30	6.1	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Fluorene	16	J	30	6.2	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Indeno[1,2,3-cd]pyrene	100		30	11	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
1-Methylnaphthalene	67		61	6.7	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
2-Methylnaphthalene	66		61	11	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Naphthalene	58	J	61	6.7	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Phenanthrene	170	B J	12	5.9	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Pyrene	330		30	5.6	ug/Kg	☆	02/12/13 13:25	02/13/13 21:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	96		30 - 130				02/12/13 13:25	02/13/13 21:58	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748C-CS

Lab Sample ID: 680-87218-13

Date Collected: 02/05/13 09:50

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 77.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	510	U	510	100	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Acenaphthylene	55	J	200	26	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Anthracene	80		43	21	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Benzo[a]anthracene	460	J	41	20	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Benzo[a]pyrene	520	J	53	27	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Benzo[b]fluoranthene	750	J	62	31	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Benzo[g,h,i]perylene	370	J	100	22	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Benzo[k]fluoranthene	310	J	41	18	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Chrysene	570	J	46	23	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Dibenz(a,h)anthracene	120		100	21	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Fluoranthene	910	J	100	20	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Fluorene	23	J	100	21	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Indeno[1,2,3-cd]pyrene	320	J	100	36	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
1-Methylnaphthalene	230		200	22	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
2-Methylnaphthalene	240		200	36	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Naphthalene	160	J	200	22	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Phenanthrene	490	B J	41	20	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4
Pyrene	860	J	100	19	ug/Kg	☆	02/12/13 13:25	02/13/13 22:17	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	87		30 - 130	02/12/13 13:25	02/13/13 22:17	4

Client Sample ID: CV0748C-CSD

Lab Sample ID: 680-87218-14

Date Collected: 02/05/13 09:51

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 65.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	30	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Acenaphthylene	21	J	60	7.6	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Anthracene	40		13	6.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Benzo[a]anthracene	260	J	12	5.9	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Benzo[a]pyrene	250	J	16	7.9	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Benzo[b]fluoranthene	380	J	18	9.2	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Benzo[g,h,i]perylene	160	J	30	6.7	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Benzo[k]fluoranthene	140	J	12	5.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Chrysene	290	J	14	6.8	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Dibenz(a,h)anthracene	52		30	6.2	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Fluoranthene	540	J	30	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Fluorene	12	J	30	6.2	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Indeno[1,2,3-cd]pyrene	140	J	30	11	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
1-Methylnaphthalene	71		60	6.7	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
2-Methylnaphthalene	61		60	11	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Naphthalene	62		60	6.7	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Phenanthrene	210	B J	12	5.9	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1
Pyrene	440	J	30	5.6	ug/Kg	☆	02/12/13 13:25	02/14/13 16:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	63		30 - 130	02/12/13 13:25	02/14/13 16:31	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748D-CS

Lab Sample ID: 680-87218-15

Date Collected: 02/05/13 09:56

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 67.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	29	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Acenaphthylene	12	J	59	7.3	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Anthracene	14	J	12	6.1	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Benzo[a]anthracene	110	J	12	5.7	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Benzo[a]pyrene	120	J	15	7.6	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Benzo[b]fluoranthene	180	J	18	8.9	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Benzo[g,h,i]perylene	77	J	29	6.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Benzo[k]fluoranthene	66	J	12	5.3	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Chrysene	130	J	13	6.6	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Dibenz(a,h)anthracene	22	J	29	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Fluoranthene	210	J	29	5.9	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Fluorene	6.4	J	29	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Indeno[1,2,3-cd]pyrene	64	J	29	10	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
1-Methylnaphthalene	39	J	59	6.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
2-Methylnaphthalene	46	J	59	10	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Naphthalene	46	J	59	6.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Phenanthrene	81	B	12	5.7	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Pyrene	170	J	29	5.4	ug/Kg	☆	02/12/13 13:25	02/14/13 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	64		30 - 130				02/12/13 13:25	02/14/13 16:49	1

Client Sample ID: CV0748D-CSD

Lab Sample ID: 680-87218-16

Date Collected: 02/05/13 09:58

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 67.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	30	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Acenaphthylene	40	J	60	7.4	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Anthracene	50	J	13	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Benzo[a]anthracene	320	J	12	5.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Benzo[a]pyrene	340	J	15	7.7	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Benzo[b]fluoranthene	550	J	18	9.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Benzo[g,h,i]perylene	230	J	30	6.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Benzo[k]fluoranthene	190	J	12	5.4	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Chrysene	360	J	13	6.7	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Dibenz(a,h)anthracene	66	J	30	6.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Fluoranthene	700	J	30	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Fluorene	17	J	30	6.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Indeno[1,2,3-cd]pyrene	200	J	30	11	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
1-Methylnaphthalene	60	J	60	6.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
2-Methylnaphthalene	78	J	60	11	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Naphthalene	88	J	60	6.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Phenanthrene	230	B	12	5.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Pyrene	570	J	30	5.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		30 - 130				02/12/13 13:25	02/14/13 17:07	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748E-CS

Lab Sample ID: 680-87218-17

Date Collected: 02/05/13 10:24

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 61.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	160	U	160	32	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Acenaphthylene	55	J	65	8.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Anthracene	44		14	6.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Benzo[a]anthracene	350		13	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Benzo[a]pyrene	400		17	8.4	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Benzo[b]fluoranthene	600		20	9.9	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Benzo[g,h,i]perylene	290		32	7.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Benzo[k]fluoranthene	240		13	5.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Chrysene	420		15	7.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Dibenz(a,h)anthracene	68		32	6.6	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Fluoranthene	740		32	6.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Fluorene	15	J	32	6.6	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Indeno[1,2,3-cd]pyrene	240		32	12	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
1-Methylnaphthalene	110		65	7.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
2-Methylnaphthalene	130		65	12	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Naphthalene	120		65	7.1	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Phenanthrene	260		13	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Pyrene	610		32	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		30 - 130				02/12/13 13:25	02/14/13 17:26	1

Client Sample ID: CV0748F-CS

Lab Sample ID: 680-87218-18

Date Collected: 02/05/13 10:27

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 69.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	29	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Acenaphthylene	21	J	58	7.2	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Anthracene	34		12	6.0	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Benzo[a]anthracene	200		12	5.6	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Benzo[a]pyrene	240		15	7.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Benzo[b]fluoranthene	370		18	8.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Benzo[g,h,i]perylene	190		29	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Benzo[k]fluoranthene	160		12	5.2	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Chrysene	260		13	6.5	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Dibenz(a,h)anthracene	55		29	5.9	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Fluoranthene	410		29	5.8	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Fluorene	10	J	29	5.9	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Indeno[1,2,3-cd]pyrene	150		29	10	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
1-Methylnaphthalene	61		58	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
2-Methylnaphthalene	68		58	10	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Naphthalene	60		58	6.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Phenanthrene	190		12	5.6	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Pyrene	360		29	5.3	ug/Kg	☆	02/12/13 13:25	02/14/13 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	83		30 - 130				02/12/13 13:25	02/14/13 17:44	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87218-1
SDG: 68087218-1

Client Sample ID: CV0748G-CS

Lab Sample ID: 680-87218-19

Date Collected: 02/05/13 10:35

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 88.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	450	U	450	89	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Acenaphthylene	110	J	180	22	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Anthracene	84		37	19	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Benzo[a]anthracene	630		36	17	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Benzo[a]pyrene	600		46	23	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Benzo[b]fluoranthene	1000		54	27	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Benzo[g,h,i]perylene	440		89	20	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Benzo[k]fluoranthene	410		36	16	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Chrysene	650		40	20	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Dibenz(a,h)anthracene	130		89	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Fluoranthene	1100		89	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Fluorene	24	J	89	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Indeno[1,2,3-cd]pyrene	380		89	32	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
1-Methylnaphthalene	130	J	180	20	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
2-Methylnaphthalene	140	J	180	32	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Naphthalene	130	J	180	20	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Phenanthrene	460	B	36	17	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Pyrene	1000		89	16	ug/Kg	☆	02/12/13 13:25	02/14/13 18:02	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		30 - 130				02/12/13 13:25	02/14/13 18:02	4

Client Sample ID: CV0748H-CS

Lab Sample ID: 680-87218-20

Date Collected: 02/05/13 13:02

Matrix: Solid

Date Received: 02/07/13 10:42

Percent Solids: 91.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	87	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Acenaphthylene	57	J	170	22	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Anthracene	68		36	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Benzo[a]anthracene	280		35	17	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Benzo[a]pyrene	320		45	23	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Benzo[b]fluoranthene	620		53	26	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Benzo[g,h,i]perylene	260		87	19	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Benzo[k]fluoranthene	210		35	16	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Chrysene	480		39	19	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Dibenz(a,h)anthracene	75	J	87	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Fluoranthene	550		87	17	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Fluorene	23	J	87	18	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Indeno[1,2,3-cd]pyrene	210		87	31	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
1-Methylnaphthalene	100	J	170	19	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
2-Methylnaphthalene	120	J	170	31	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Naphthalene	110	J	170	19	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Phenanthrene	300	B	35	17	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Pyrene	470		87	16	ug/Kg	☆	02/12/13 13:25	02/14/13 18:21	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		30 - 130				02/12/13 13:25	02/14/13 18:21	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)